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Agency Secretary

# Air Resources Board

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Arnold Schwarzenegger  
Governor

## MEMORANDUM

TO: George Lew, Chief  
Engineering and Certification Branch

FROM: Joe Guerrero, Manager  
Engineering Evaluation Section

DATE: March 4, 2005

SUBJECT: 200 AND 100-CAR MATRIX UPDATE

As you requested, we have updated the 200-car matrix based on current data which takes into account the following:

- (1) populations of registered automobiles by model year in various classifications effective at the end of 2003 (from a printout received from DMV, contacts: Chris Terwilliger, 657-8844, and Michelle Rodriguez, 657-5822, both of Information Systems Branch, Policy Development Section, DMV), and
- (2) model-estimated miles per day per vehicle and relative vehicle population as a function of model year for automobiles and for light and medium trucks (from a spreadsheet file furnished by Doug Thompson and Tom Scheffelin of ARB's Planning and Technical Support Division (PTSD), Motor Vehicle Analysis Branch, Motor Vehicle Assessment Section).

The update was determined in accordance with TP-201.2A, Determination of Vehicle Matrix for Phase II Systems. The updated 200-car matrix is as follows:

| 200-Car Matrix |          |      |      |        |       |          |          |        |        |        |
|----------------|----------|------|------|--------|-------|----------|----------|--------|--------|--------|
| years          | Chrysler | Ford | G.M. | Toyota | Honda | Niss/Dat | VW/Volvo | others | trucks | Totals |
| 2002-2005      | 2        | 4    | 5    | 5      | 3     | 2        | 2        | 4      | 16     | 43     |
| 1999-2001      | 2        | 5    | 5    | 4      | 2     | 2        | 1        | 3      | 17     | 41     |
| 1995-1998      | 2        | 5    | 5    | 3      | 2     | 1        | 1        | 3      | 14     | 36     |
| 1988-1994      | 2        | 5    | 5    | 4      | 3     | 1        | 2        | 4      | 15     | 41     |
| 1958-1987      | 2        | 4    | 6    | 2      | 1     | 2        | 2        | 2      | 18     | 39     |
| Totals         | 10       | 23   | 26   | 18     | 11    | 8        | 8        | 16     | 80     | 200    |

*The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Website: <http://www.arb.ca.gov>.*

California Environmental Protection Agency

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As noted previously, trucks may be distinguished from truck-like vehicles based on license plates - autos and trucks have distinctively different types of plates. Trucks over 8500 lbs rated gross vehicle weight (GVW) should not be tested and only gasoline-fueled vehicles should be tested. The 8500 lb. cutoff on GVW was previously 6000 lb. – the 8500 cutoff is justified based on typical truck weights and is necessary due to a change in weight category cutoffs by PTSD.

For informational purposes, the following table shows the comparable 100-car matrix.

| <b>100-Car Matrix</b> |          |      |      |        |       |          |          |        |        |        |
|-----------------------|----------|------|------|--------|-------|----------|----------|--------|--------|--------|
| years                 | Chrysler | Ford | G.M. | Toyota | Honda | Niss/Dat | VW/Volvo | others | trucks | Totals |
| 2002-2005             | 1        | 2    | 2    | 2      | 1     | 1        | 1        | 2      | 8      | 20     |
| 1999-2001             | 1        | 2    | 2    | 2      | 1     | 1        | 1        | 2      | 9      | 21     |
| 1995-1998             | 1        | 3    | 2    | 1      | 1     | 0        | 1        | 2      | 7      | 18     |
| 1988-1994             | 1        | 3    | 3    | 2      | 2     | 0        | 1        | 2      | 7      | 21     |
| 1958-1987             | 1        | 2    | 3    | 1      | 1     | 1        | 1        | 1      | 9      | 20     |
| Totals                | 5        | 12   | 12   | 8      | 6     | 3        | 5        | 9      | 40     | 100    |

If you have questions or need further information, please contact Peter Kosel at (916) 322-8930 or via email at [pkosel@arb.ca.gov](mailto:pkosel@arb.ca.gov).

cc: Bill Loscutoff  
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